Bill Richards

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I am a highly experienced Agile Development Coach and Mentor with proven excellence in BDD, DDD, and TDD with over 20 years of commercial experience involved with .Net since the Beta versions in 2001, and various other technologies, including VB, Java, Ruby, C, C++, HTML, XML, SOAP, RPC, Azure, .NetCore, etc.

My diverse career spans public sector, commercial, gaming, consumer electronics, utilities, IT services and more, I am a technically confident senior delivery/value-focussed individual with detailed recent experience of specialisation in implementing, coaching and mentoring Agile change.

Typically operating in a lead capacity at a Principal level, I enjoy the diversity which this brings; and over the past six years have mostly been involved in coaching and mentoring the adoption of Agile and XP practices from the development teams up to C-level.

Some of my more recent roles have involved turning around disenfranchised development teams – reinvigorating and re-engaging them and giving them a framework within which to thrive, develop and grow, wanting to take on responsibility.

I am a strong change manager, able to effectively implement and embed new working practices and methodologies, which is evident throughout my career.

I have been influential in driving forward several initiatives including assisting with the transition to an Agile environment for a major organisation; moving away from huge Rational licensing costs by implementing an alternate open-source solution following strategic considerations around long-term scalability and "supportability"; and changing architectures from a tradition of monolithic services function to micro-services, and more.

Technology	Years experience
Visual Studio Code, PlatformIO, Visual Studio v6, .Net (v7), 2003, 2005, 2008 beta 2, 2008, 2010, 2013, 2017, 2019	20+
XML, XSL/T/FO, XPath, XSD (XML Schema), SVG, SOAP, WML	20+
Relation Databases, including: Oracle 7, 8i, 9i,11g; SQL Server. V6.5, 7, 2000, 2005, 2008, 2012 - Express Edition, Compact Edition	20+
Source Control systems: SVN (Tortoise), Visual SVN, Perforce, TFS, SourceSafe, SourceGear, Mercurial, Git (Hub, Lab), VSTS	20+
HTML, DHTML, CSS, JavaScript, VBScript, WSHost	20+
UML	20+
C# (1.0, 2.0, 3.0, 4.0, 5.0, 7.0) .net framework: beta through to 7.0, .net core 2.0, 2.1	20+
Messaging: MSMQ, Rabbit, Microsoft Message Bus	20+
NUnit, TestDriven.Net Visual Studio add-in, NCover	15+
Windows Presentation Foundation (WPF)	19+
ASPX, ASMX (ASP.net & Web Services), versions 1.0 - 2.0	15+
Java including: Servlets, Applets, JSP, Spring Boot	7+
MS Visual Basic 6, ASP 1.0, 2.0	5+
Embedded C/C++, ATL, STL, MFC, Win32 API, COM, COM+, MTS, IDL	7+
Docker, OpenShift	5+
WCF, WWF	2+
Vagrant, Puppet, VirtualBox	2+
Document database (MongoDb)	3+

Other technologies

- Ruby, RSpec, Gherkin, Cucumber, SpecLog, SpecFlow, Powershell, YAML, Jenkins
- Prism, Unity, InstallShield, Wix, NodeJs, Angular, TypeScript, Nunjucks, HAPI, and more.

Employment Details

May 23 - Current Offshore Operations Ltd - Winchester, Hampshire

Senior Software Engineer (Contract) - Telemetry

- C, C++, JavaScript, HTML, Espressif ESP-IDF
- FreeRTOS,
- VB6, C#, ASP, MVC
- Windows desktop, Web
- ESP32, Hardware interfacing (UART, IIC, SPI)
- SPIFFS virtual file system, OTA updates
- WiFi
- Visual Studio Code
- GitHub

Invited back to continue helping with the research and development of an MCU based telemetry system. Having abandoned the Arduino framework for ESP32 development and instead opted for the Espressif ESP-IDF, I have been creating a series of IDF components, whose main functionality covers: configuration stored locally using the SPIFFS file system; IIC communications component which allows a master's to round-robin collection of data (via the IIC Bus) from any number of connected devices, each with varying data sizes (from 1 byte up to 2Kb); OTA (Over the air) firmware and file system updates using local (to the MCU) wi-fi connectivity.

Converting Windows application from VB6 to.Net, extended functionality and bug fixes.

January 22 - March 23 Underwriters Laboratories, Basingstoke, Hants

Senior Software Engineer (Contract)

- C#, , Powershell , Xml, JSON
 - MongoDb
 - RF Testing (Broadcom and Qualcomm)
 - Laboratory Test Automation
 - Automation of Equipment Under Test
 - Automation of testing equipment
 - Laboratory Test Equipment interfacing (GPIB, Eth) and automation
 - Boonton Power Sensors, R&S Signal Analyzers, Pickering Switches

Underwriters Laboratories (UL) are primarily a safety testing organisation, highly regarded within their field of expertise. They provide testing of many different products and product types and their seal is internationally recognised as an endorsement for products operating within and conforming to specific standards as detailed by various international committees.

I was engaged to extend the functionality of existing testing tools in order to automate the testing of a new standard (EN303687) and to extend the tool to test against the updated EN301893(6e) to cater for 5GHz transmissions.

The work initially involved some reverse engineering (using dotPeek) and some detective work in piecing together a "best fit" base for the source code. A good few hours spent refactoring the code enabled me to gain an understanding of how the software worked, how it hangs together and the framework upon which it was built.

Whilst extending the tool through code, I found various ways of making the tool more easily extensible by externalising several data points, which had ultimately been part of the reason for requiring the current coding exercise.

All data are stored in MongoDb, so there is extensive use of JSON throughout the tools. Report Schemata are defined in JSON and DocumentFormat.OpenXml is used to create Word report documents.

Control of devices under test are primarily achieved using SSH sessions over ethernet, though on occasion Telnet is required.

Control of the testing equipment is generally over ethernet with the use of libraries (APIs), though some older devices use the slower GPIB interface.

<u>December 20 - January 22 Offshore Operations Ltd - Winchester, Hampshire</u>

Senior Software Engineer (Contract) - Telemetry

- C/C++, PHP, JavaScript, JQuery
- FreeRTOS, Mosquitto, Node-Red
- Hardware interfacing (UART, I2C, SPI)
- WiFi, 433MHz, LoRa, MQTT, ESP-NOW, ESP_MESH
- Rpi, ESP32, ESP8266, W&T PureBox, W&T COM Server
- MySQL, SQLite, PlatformIO
- GitHub

Engaged during a period of Research and Development, I was tasked with ascertaining the usability of various hardware items ranging from processing modules (eg. ESP32-WROOM-32/U, ESP8266, etc.), development boards, (eg. NodeMCU, Espressif ESP332 Dev Kit, etc.), sensors (eg. IMU ICUs, etc.), communications protocols and platforms (eg. ESP-NOW, LoRa, Wifi, 433MHz radio, etc.).

One of the hardware platforms (W&T Purebox 3.0) runs a Debian distribution and is used as a TCP gateway for various serial comms peripheral devices. The server can act as a data repository using a MySQL database or SQLite. Services are installed and run on the server using PHP. Control of the services is achieved via a bespoke PHP implemented control panel.

The Espressif micro-controllers run a FreeRTOS port, and are programmed using C and C++ (OO is supported, but with only a subset of the STD library). With exception of the ESP32-WROOM-32/U chips the controllers are single core. Multi-threading is supported by the RTOS, as are Interrupt Service Routines, which makes it ideal for running on such micro-controllers. The Espressif ESP8266 and ESP32 chips run integrated Wifi and the ESP-NOW and ESP-MESH communication protocols, with the ESP32 also supporting Bluetooth BLE.

Unfortunately, again due to a COVID related downturn in investment within the sector which Offshore Operations are concerned, the business has found itself in a position which is unable to support the expense of further R&D at this time.

<u>July 20 - November 20 Messer Cutting Systems GmbH - Groß-Umstadt, Germany</u>

Senior Software Engineer (Contract)

- C#, WPF, PowerShell, PRISM
- Hardware interfacing to CNC, Beckenhoff TwinCAT
- Pivotal Tracker
- Git (Bitbucket), Mercurial

Engaged as a task based Senior Developer as part of a globally dispersed engineering team working on Messer Cutting Systems' next generation HMI, I was responsible for and delivered: Straight line optimization for cutting tool history; Migration of source from Bitbucket Mercurial to Bitbucket Git; component to request and respond to physical confirmation from cutting machine; scrolling problem when selecting items from list control containing more items than are visible; new framework for all simulation programs and move existing programs to utilize that framework –removed all references to simulation from the HMI code and implemented the new framework utilizing a composite approach with PRISM.

During this engagement I had instigated several architectural discussions in order to impart my knowledge and experience of developing composite applications using the PRISM framework; properly implementing IoC through DI - extoling the benefits and conversely the drawbacks of not using it properly.

This engagement was terminated due to a downturn in construction, and consequently machine sales for Messer, brought about as a direct result of the COVID-19 pandemic.

January 20 – April 20 CNL Software Ltd - Camberley, Surrey

Senior Software Engineer (Permanent)

- C#, VB.NET, WinForms, WPF, WCF. PRISM
- WIX
- SqlServer
- PowerShell, Cucumber/Gherkin
- Jira, Confluence
- VTSTS (not Git)

Employed as a Senior Developer to bring experience and skills to a relatively junior development team: to advise on and encourage industry accepted patterns and standards of development; to modernize and update the UI (using WPF) from WinForms; to assist on breaking a monolithic application into a micro-service architecture; to lead new development whilst conforming to industry standard methodologies, patterns and practices.

I introduced the concept of feature branching and the GitFlow model; demonstrated the implementation of Inversion of Control through Dependency Injection, and the use of the PRISM Framework, by reworking several components and implementing new ones.

<u>July 19 – Dec 19 Supply Point Systems - Portchester, Hampshire</u>

Senior Software Engineer (Permanent)

- C#, WinForms, .net Core, MS MVC, Angular
- Docker
- SqlServer
- CI/CD pipeline using Kiln, TeamCity, PowerShell
- BitBucket, Jira, FogBugz
- Hardware interfacing using MODBUS protocol, and proprietary protocol

Hired to fill the Development Lead role, guiding technology uptake, mentoring less senior team members, introducing Continuous Integration and setting up the development pipeline to accommodate this, I was partly responsible modernising the development workflow: moved source from FobBugz's Kiln to BitBucket and introduced the Git-Flow development process; assisted in moving active issues from FogBugz into Jira.

I mentored the team in the how, why and what of peer-reviews for coding tasks. I introduced configuration as code for build job definitions in TeamCity, coached junior developers in development practices (SOLID, KISS, paired-programming) and Object Oriented design and implementation.

Worked closely with the Development Manager in identifying the skills and needs of the individuals within the team, I assisted in introducing The Three Amigos, User Stories and acceptance criteria whilst re-shaping the testing team into a QA team.

The R & D function is split across sites within the UK, Romania, and the USA, and I assisted in the hiring process to fill roles in each of these locations.

October 18 - March 19 Veterinary Medicines Directorate (VMD) - New Haw, Surrey.

Agile Senior Software Engineer (Contract)

- C#, .NetCore, Web API, NSwag, Node.js, PowerShell, xUnit
- Node Red, Nunjucks, SeriLog, ELK Stack
- MongoDb
- CI/CD pipeline using Github, Jenkins, Docker, Azure
- Open Source
- JIRA, Confluence

Working on a project as part of the EU exit program I was brought in as a .Net expert to develop services exposed through RESTful endpoints.

Whilst migrating existing on site relational data storage to a cloud based document solution and attempting to utilize Azure Cosmos we discovered that the MongoDB implementation was found to be lacking and instead moved to a MongoDB Azure hosted solution. In line with Public Sector mandate, the solution is built entirely using Open Source offerings, including our own Github hosted source.

End user facing applications were built using NodeJs server side composition with Nunjucks and the GOV.UK design system, hosted in Linux Docker images on the Azure platform. Backend services were built using .Net Core 2.1, again hosted in Linux Docker images on the Azure platform. The solution utilizes the ELK stack (Elastic Search, Logstash, Kibana) for reporting.

Along with assisting in providing the solution, my role was to help the team understand and utilise Agile practices (SCRUM, backlog grooming, etc) and to help the team to transition their Java skills to the .Net platform; guiding software development best practices, and design patterns, Asynchronous and Parallel processing, etc. using C# as the underlying implementation language.

May 18 – July 18 BMW Financial Services - Farnborough.

Agile Software Engineer (Contract)

- C#, VB.Net,
- Oracle, PL/SQL, SQL Developer
- CI pipeline using Bitbucket, Jenkins, Docker, Openshift
- RabbitMQ
- JIRA & Confluence

BMW as a global business are currently undergoing an Agile transformation, this for the Financial Services part of the business is in tandem with an modernisation programme for their internal systems, exposing legacy systems to and developing new systems for operation in the cloud.

During my brief tenure, I was instrumental in the incorporation of automated unit testing into the development process. I helped to identify areas within the business which were antagonistic to rapid development and deployment. I was part of the technical guidance team whereupon we determined the technical direction, in terms of tools and implementation concepts.

Most of my work was carried out enhancing an old VB.Net application under the GDPR compliance project, implementing an MVVM pattern in order to remove the business logic from within the UI, and producing a suite of Unit tests to ensure the new functionality.

I introduced the development team to concepts such as Queuing and Routing, Message Exchanges, Event Stores, immutable database structures, composite application development, hexagonal architecture, choreography versus orchestration, SOLID principles, and benefits of continuous development/testing/integration/deployment.

In my own time I built a choreographed service implementation to demonstrate to the team how such a system hangs together and interacts. This was an application put together using the PRISM framework, and a Docker image from RabbitMQ.

My final task was to create and populate a data-structure hosted in Oracle to enable reporting at various degrees of granularity on customer retention. The data structure creation and population was implemented in PL\SQL and, for demonstration purposes only, the reporting was implemented using SQL Developer reporting tools.

Oct 17 - April 18 Omnico Group Ltd - Eastleigh.

Contract Software Engineer

- C#
- XAML (WPF), MVVM
- REST & WCF
- SOAP
- Angular, Typescript
- C++ & COM
- SQL Server & T/SQL
- Multithreading, IOC (using MS Unity and PRISM), API development
- Mog + Nunit, PowerShell
- CI pipeline using Jenkins and VSTS

Omnico Group is a global leader in hospitality and retail point of sale and back office solution provision, with an impressive portfolio of corporate clients, who are currently undergoing sweeping changes within their software engineering department positioning themselves within the SAAS market.

I have been working alongside the permanent team members assisting, initially on a stabilization project as part of a larger corporate move towards becoming a Product Vendor as opposed to a Bespoke Solution Provider; and more recently on a project focussed on preparation for new GDPR legislation conformance.

The front end is composed from of variety of technologies including WPF, HTML (driven by Angular.js) and C++ COM components. The backend is comprised of, C# WCF services, C# Web API driven RESTful services, SQL Server databases. The whole system is almost 100% configurable and driven by a configuration architecture realised through an Xml implementation.

During my time with Omnico, I was able to introduce team members to Test Driven development concepts and consult on RESTful interface practices, Fluent interface implementations, and composite application patterns and practices

Sept 16 - April 17 Ordnance Survey Ireland - Dublin.

Contract Agile Coach (tactical)

- SpecLog
- RSpec, Cucumber/Gherkin
- Setting up CI pipeline using Jenkins and Gitlab
- Jira & Confluence

As an associate with GeoByte Consulting Ltd, I initially assisted OSi in drafting the RFT for their current largest technical project (CRISP). I was further engaged to provide guidance, mentoring and coaching of the business whilst they adopt Agile techniques, methods and practices across the business, but in relation to the CRISP (Commerce Replacement Integration and Supply Platform) Project.

Upon awarding of the project, I was initially involved with the tenderer advising OSi as to whether or not they (the incumbent supplier) were meeting both the requirements and their expressed competencies. Helping with ensuring a commitment to Test Driven Development through the implementation of Acceptance Tests, and specification by Example (Gherkin). Helping the incumbent and OSi to understand the roles of an Agile team, what is meant by Continuous Integration, Continuous Delivery, the misconceptions around delivery of a COTS based solution being different to a bespoke solution. Helping OSi to understand what they need to provide for their development team, helping the development team to understand what they need to provide to the business.

I have been assisting with various business stakeholders to understand the process of specification by example; how to write a user story, what a user story is, how their needs are addressed and met by the delivery team.

I have been helping the delivery team to understand the concepts behind TDD, and CI, and how to go about providing their own implementations thereof.

We have used various tools towards these ends, though mostly SpecLog, RubyMine (Ruby and Gherkin), Jenkins, JIRA and Confluence.

Oct 15 - Sept 16 Ordnance Survey - Southampton.

Contract Agile Software Surgeon (Microservices Development) and Mentor

- Java 8 , Springboot, YAML
- · Ruby, RSpec
- CI/CD pipeline using Jenkins, SVN, and Cucumber/Gherkin
- RabbitMQ
- Oracle LINUX

Working on a high profile project whose aim is to build an extensible microservices system based on the hexagonal architecture (ports and adapters).

The solution is distributed across multiple Linux and Windows servers, communicating via Restful endpoints and a publish/subscribe messaging system (RabbitMQ). This particular solution incorporates COTS integration with bespoke functionality which is exposed through microservices constructed in Java. Springboot is ultimately used to expose the services via a restful interface, and services are monitored and tracked through self registration with the Eureka discovery server.

All developers on the project are polyglots, with the technology stack including the likes of; Java, FME configuration, Ruby, Gherkin, Python, PL/SQL, YAML, and shell scripting amongst others.

There is a degree of mentoring and coaching involved, in terms of engineering practices and concepts, though not necessarily in respect to any specific technology

Dec 14 – Feb 15 Escalon Ltd – Watford.

Agile Consultant

- User Story shaping (definition and refinement)
- Test strategy specification
- Acceptance test shaping

Working with one of our partner consultancies I was charged with laying out a specification for the test strategy to be utilized on the "Address Lookup" project for United Utilities –a million pound GIS project anticipated to run for the at least the next twelve months. This involved creating a presentation based around BDD and TDD and how this can be achieved whilst implementing a solution utilizing COTS packages and working alongside a third party supplier of testing resources.

My expertise was also required in assisting the shaping of the both the initial set of User Stories and the initial set of acceptance Tests, specified in Gherkin using SpecLog.

May 14 - Dec 14 Ordnance Survey - Southampton.

Contract Senior Agile .Net developer

- .net 4.0, Visual Studio 2013 C# 4.0, WCF, WIX
- Oracle 11g, Oracle BPEL integration
- Agile, Scrum, Kanban, Continuous Integration (Jenkins), Powershell scripting
- Git, SVN, Bash, Puppet, Vagrant
- CI/CD pipeline using Jenkins, nUnit, SpecLog, SpecFlow, Ruby, Gherkin, ReSharper
- Windows 7, Windows 2008 Server, Win32 Services, LINUX

Brought back to continue help with the IS department's transition to using Agile methodologies, and to assist in the delivery of the high profile GenIE project. Working in DevOps, building virtual machines with Vagrant and provisioning with Puppet to create a continuous environment, enabling both continuous integration, and delivery.

Moved into the team responsible for building a system through bespoke software development and integration of various COTS packages, making use of the continuous environments as provided by the DevOps team.

Worked on the application responsible for change notification between the OS's main geo-data storage and management system and the GenIE system. The system is being developed using BDD and TDD techniques, utilizing tools such as JIRA, SpecFlow, SpecLog, Gherkin, Cucumber, Ruby, RSpec, Moq, nUnit, for development; Jenkins, Powershell, Puppet, Vagrant, Oracle VirtualBox, for build test and deployment.

Assisted in Story definition and took part in various other Agile ceremonies including, working as part of a team grooming Stories, and planning Sprints.

June 13 - May 14 Escalon Ltd- Watford/Alton

Senior Partner

Project: Prepare tenders for various government agencies and utilities providers.

We have been putting together tenders for various governmental and Utilities provider contracts, creating sales leads, and forming strategic partnerships: we are partners on the SpecLog Ambassador program.

As a business we offer "plug-and-play" Agile development solutions, both in house and outsourced. We provide on-site, hands-on coaching and training, helping businesses to understand, take on, and properly implement Agile methodologies and techniques, such as team forming, Scrum, DDD, BDD, and TDD, Continuous Integration, Continuous Delivery, backlog management, etc.

Nov 11 – June 13 Ordnance Survey – Southampton.

Contract Agile Coach and Mentor/.Net developer

- .net framework versions 3.5, 4.0, Visual Studio 2010 C# 3.0, 4.0
- Oracle 11g, Workspace manager, (PL/SQL), BPEL integration, SOA Suite
- Scrum, Kanban
- Continuous Integration (Jenkins), Continuous Delivery
- Maven, Sonar, SVN, ReSharper, Powershell, FitNesse
- CI/CD pipeline using Jenkins, nUnit, SpecLog, SpecFlow, Ruby, Cucumber
- RedGate Schema Compare; DBDeploy

Project: Hands on Agile coach for the Multi-Resolution Data Programme.

Join the "Multi Resolution Data Programme" and assist in getting the project back "on track". Without working on the actual solution, help the team to achieve Continuous Integration and Delivery through the application of Scrum, automation, Agile developmental practices and a change in mind set from traditional (waterfall style) development approaches to those espoused by the IS department.

- Combined multiple (60+) individual Jenkins build jobs, into a more manageable an efficient number; removed build logic from Jenkins and into PowerShell scripts; removed third party tools (Maven, etc.) from the *deployment* process. Re-assessed continuous delivery around database development/deployment
- Reduced deployment times from six days to approximately 30 minutes
- Restructured team into smaller more manageable Scrums; assisted with sprint planning and backlog refinement (differences between Story points and Sprint estimates, etc.); helped the Scrum Masters to grow into their roles by offering support and expertise in Agile methodologies

Project Enhanced Conflict Resolution Workflow.

Working on a high profile, project whose effects will be felt in meeting customer SLAs; the GDMS system as delivered by "the consortium" has been found lacking in the area of conflict resolution. According to the architecture as laid out by the project architect a solution is required to resolve data conflicts. The project team will develop a paradigm for all future development within GDMS, utilising Agile techniques and methodologies. This will form an initial step to transitioning the entire IS department to approaching projects in an Agile fashion.

Project: Steering group for the uptake of Agile delivery methodologies.

Working within a team of senior development staff, the mandate is to produce a "roadmap" for future projects and their approach to continuous integration and continuous delivery; the output of this group should be an identified suite of tools and development practices for the GDMS teams and ultimately the entire IS development department.

Project: Responsibility for junior team members' professional development.

Assigned junior team members to mentor in software development tools, techniques, and concepts; this is to include general Object Oriented Design and Development; Microsoft .Net; Test Driven Development; Behaviour Driven Development; Domain Driven Design.

Aug 11 - Nov 11 Betfair - Hammersmith, W6.

Contract Agile .Net developer (WPF/PRISM specialist)

- .net framework version 4.0, Visual Studio 2010 C# 4.0, Rx extensions
- WPF, XAML, Composite Application Library (Prism), MVVM, Multi-threading
- ReSharper, Continuous Integration (Team City, Cruise Control), Perforce
- Scrum, Rally (for story management)

Project Assist in the replacement of several functional areas for an internal application.

Working on a high profile, internal project for Betfair, assist in delivering this critical stage of the project's development. Removed a "framework" put in place for loading plugins, and replace with PRISM managed modules, to enable an easy upgrade path to remove the WinForms, ASP, OCXs, VB Script, JavaScript, WPF, .Net, and Java components and replace with WPF controls. Introduced the team to asynchronous development (Rx extensions) and utilising the Task Parallel Library (TPL).

March 11 - May 11 Sony Europe - Basingstoke, Hants.

Contract Lead .Net developer (PRISM specialist)

- .net framework version 4.0, Visual Studio 2010 Ultimate, C# 4.0, SQL Server 2008
- WPF, XAML, Composite Application Library (Prism), MVVM, WCF, Multi-threading
- TDD using Visual Studio TFS and ReSharper
- Telerik Just Mock, Telerik RAD controls, MS Ribbon Control
- Scrum, Paired Programming.

Project: Assist in the delivery of an application for an internal client.

Working on an extremely high profile, internal project for Sony Europe, assist in delivering this critical stage of the project's development. To achieve sign off after UAT, the project needs to adhere to the specified criteria for logged defects of varying degrees of severity. Assistance was required in order to attain those criteria. Mostly this position involves bug fixing, with a minimal amount of new requirement implementation. This involved a degree of refactoring of the existing codebase and retro-fitting unit tests. Expertise was required in the areas of composite application development, WPF, and distributed applications. Introduced the team to Multithreaded task management.

Jan 10 - Jan 11

Cincom Systems (UK) Ltd - Maidenhead, Berks.

Contract Composite Application Library for WPF (PRISM) specialist/Agile mentor

- .net framework version 4.0, Visual Studio 2010 Ultimate, C# 4.0, SQL Server 2008
- WPF, XAML, Composite Application Library (Prism), MVVM, WCF, Multi-threading, MS Enterprise Library 4
- TDD using Visual Studio TFS, ReSharper, and Rhino Mocks
- · Scrum, Paired Programming.
- Mentored junior staff

Presented knowledge transfer sessions pertaining to; the concepts, patterns and practices utilised on the project; the architecture for the application; the developed frameworks; OO concepts and design principles; and PRISM

Project: Assist in the design and implementation of an application for an external client.

Cincom's client commissioned a bespoke application to be used across their entire company structure, and to replace the six individual applications contemporarily covering specific areas of functionality within their sales field. The application was developed brand independent with the ability to apply WPF themes to enable the single application to be used across the client's child brands. The application was designed in a manner to enable functional areas of the application to not only be available or not, based upon the current user; but also to be physically delivered to the user's machine based upon that user. The application is language neutral in order to be used across the entire range of the client's countries of operation.

Oct 09 – Jan 10 Centrica – Staines, Surrey.

Contract Software Developer, (PRISM & TDD specialist)

- .net framework version 3.5, SP1, Visual Studio 2008, SP1, C# 3.0, SAP integration
- WPF, XAML, Composite Application Library (Prism), MVVM
- Smart Client (occasionally connected).
- nUnit, xUnit, mbUnit. Rhino Mocks, Moq
- TDD using TestDriven.Net integration and ReSharper
- Tortoise SVN and Visual SVN source control management Visual Studio plug-in
- Mingle, VersionOne, TeamCity, Scrum, Paired Programming.

Project: Amend existing application to incorporate OFGEM requirements.

An existing sales tool required enhancements in order to comply with several OFGEM requirements, specifically with respect to calculation transparency.

Project: Assist in the delivery of a new application to assist Centrica engineers in the delivery and maintenance of their new Smart Metering offering.

Expertise was required in the area of Composite Application Development, and Unit Testing to enable functional areas from within the Smart Metering application to be utilised in other "applications" within the entire Field Systems suite. Demonstrated and tutored on the necessity of a test suite to ensure no loss of existing functionality during the process of adding new functionality.

Project: Assist in the solution level architecture specification for a new suite of tools for use by Centrica Service and Repair Engineers.

Specified application level architecture (i.e. how to write a Composite Application using the Prism Framework), and more specifically proposed a strategy for migrating the existing application suite to a series of Composite Modules. Specified the development/productivity tools set for the project.

Project: Provide PowerPoint Presentation describing best practices for Composite Application Development using the Prism Framework.

Presentation highlighting best practices and common "gotchas" for implementing a composite application using the Prism Framework –backed up with several C# projects/solutions to demonstrate such. I also provided tutorials for Test Driven development, using nUnit and Rhino Mocks.

<u>July 09 – Jan 12 Simon Butler Skiing Ltd – Ripley, Surrey.</u>

.Net Service Provider

- .net framework version 3.5, SP1, Visual Studio 2008, SP1, C# 3.0, MS Enterprise Library 4
- ASP.NET, Web User Controls, AJAX extensions, IIS
- . WPF, XAML, Composite Application Library (Prism), MVVM, WCF, Multi-threading
- Smart Client. ClickOnce deployment.
- SQL Server 2005
- TDD using TestDriven.Net nUnit integration and ReSharper

Project: Create and host the client's web site

Project: Implement a client's public facing booking system, and a corresponding

private application.

June 09 - May 12 Ancient Remedy Centre Ltd - Alton, Hampshire.

.Net Service Provider

Project: Create and host the client's web site.

<u>Dec 08 - May 09</u> <u>EuroKing Miracle Limited. - Addlestone, Surrey.</u>

Contract Analyst/Software Developer, .Net Consultant

- .net framework version 3.5, SP1, Visual Studio 2008, SP1
- C# 3.5, WPF, Composite Application Library (Prism), MVVM
- CodeDOM, Reflection
- Subversion Source Control Tortoise SVN, Visual SVN Server
- Agile Dynamic Systems Development Method (DSDM) (Continuous Integration)
- .net framework version 3.5, SP1, Visual Studio 2008, SP1
- TDD using nUnit, Rhino Mocks, and ReSharper

Oct 08 - Nov 08 Elateral Limited. - Farnham, Surrey.

Contract Agile Developer, .Net Consultant (PRISM specialist), Team Leader

<u>May 08 – Oct 08</u> <u>EuroKing Miracle Limited. – Addlestone, Surrey.</u>

Contract Analyst/Software Developer, .Net Consultant

Oct 07 – Jan 08 Geoff Howe Ltd. – Hampton, Surrey.

Contract Analyst /Software Developer

<u>Sept 07 - Oct 07 Compel Reach Ltd. - Guildford, Surrey.</u>

Contract Analyst /Software Developer

Jul 06 - Sept 07 BizCase Ltd. - Farnham, Surrey.

Contract Analyst /Software Developer

Jan 06 - May 06 Systems Union Ltd. - Farnborough, Surrey.

Contract Consultant/Software Developer

Aug 05 - Oct 05 Atos Origin (DEFRA) - Guildford, Surrey.

Contract Consultant/Software Developer

Contract Consultant/Software Developer

<u>Aug 04 - Sept 04</u> Online Travel Corporation Plc - Teddington, Middlesex.

Contract .Net Consultant/Developer

<u>Feb 04 – Aug 04</u> Advantage Technical Consulting – Farnham, Surrey.

Contract Software Developer

<u>Jan 02 – Feb 04</u> Patientline Ltd – Slough, Berkshire.

Software Developer, Permanent Staff

Feb 01 – Oct 01 wwa.sysmed – Egham, Surrey.

Software Developer, Permanent Staff

April 00 - Jan 01 Sopheon -Guildford, Surrey.

Software Developer, Permanent Staff

Education

Sep 96 – May 99 UCNW Bangor. BA(Hons) Linguistics and the English Language **Sep 95 – June 96** NESCOT, Surrey. A Level Psychology

1985 – 1990 Ewell High School 9 GCSE 2 A level